

THREE NEW UROPODINID MITES TAKEN WITH RATS IN PUERTO RICO¹

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The mites of the Cohors Uropodina described below were taken during rat ectoparasite surveys made in connection with studies on murine typhus fever. That they have any epidemiological significance is not likely, but their association with rats makes it eminently desirable that they be provided with names. Five other species were previously described having been taken under similar circumstances (Fox, 1948) and undoubtedly more will be found in the course of these investigations. Types of these new species are in the entomological collection of the Department of Microbiology, School of Medicine, School of Tropical Medicine, San Juan, Puerto Rico.

Trachyuropoda borinqueni n. sp. (Figure 1, A-E)

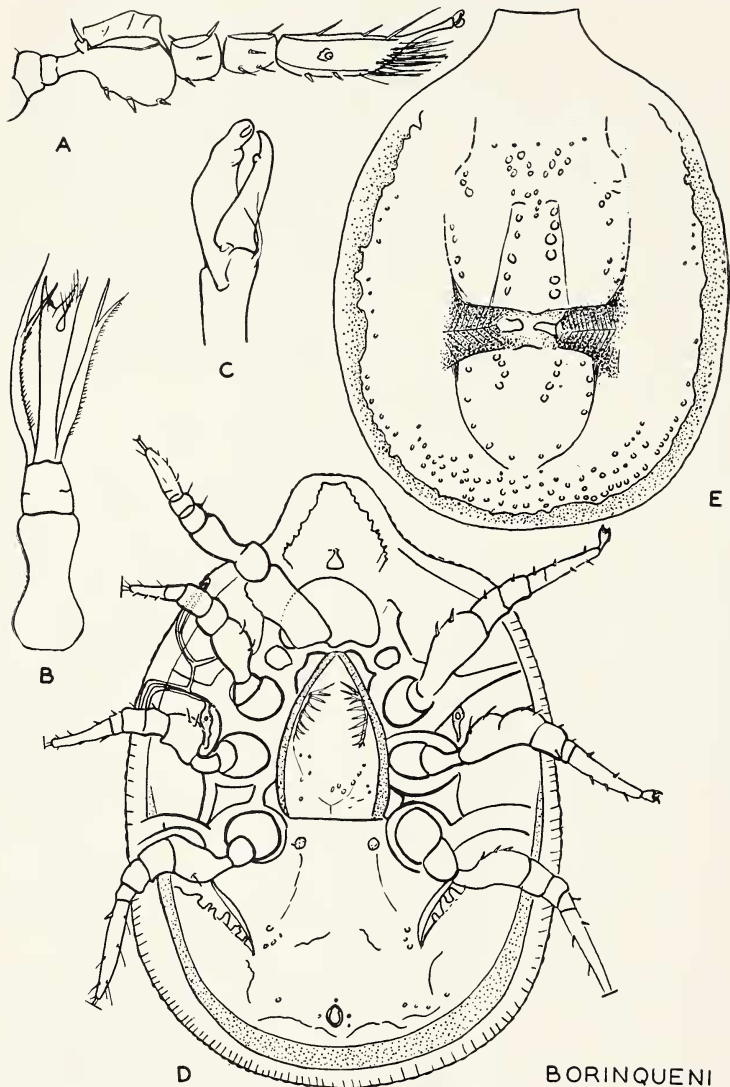
Female.—Length, 908 μ , width 667 μ . Body oval with conspicuous shoulders and a projecting vertex, posteriorly broadly rounded, lateral margins not smooth. Dorsal plate (Fig. 1, E) with the protusions characteristic of the genus, particularly two expanded portions, a longer anterior one and a shorter posterior one, between is a deep furrow containing a ridge-like structure on each side. Trägårdh (1952) in his description of *T. elegantula* states that these peculiar structures are made up of "about 12 pairs of leaf-shaped bristles which almost meet in the middle," but in the specimen here described, if the structures do indeed consist of such bristles, they are so closely appressed as to lose their individuality and appear to meet in the middle. Four rows of tubercles present on the protusions, but the middle two are more pronounced than the outer ones, and tubercles are also dense on the posterior margin. Vertex and lateral margins markedly sculptured, but without the dense row of setae that characterize *T. elegantula*.

Ventrum with lacunae on each side anterior and posterior to the genital plate and also between legs I and II as well as legs III and IV. Tritosternum (Figure 1, B) with the lacinia trifurcate, the outer branches with a fringe of fine hairs on one side and each of the three branches bifurcate distally. Movable digit of chelicera

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(Figure 1, C) with one rounded tooth distally. Genital plate more or less triangular anteriorly reaching well beyond coxae I and



BORINQUENI

Fig. 1.—*Trachyuropoda borinqueni* female. A. Leg I. B. Trittosternum. C. Chelicera. D. Ventrum. E. Dorsal plate.

posteriorly to about the anterior third of coxae IV, its anterior portion bearing a row of 8–10 irregular spines diminishing in size

on each side (Figure 1, D). Stigmata on a level with the posterior borders of coxae II. Peritreme with the poststigmatic branch reaching to about the middle of coxae III; anteriorly it follows a course apparently similar to that of *T. elegantula* although in several places it is very difficult to discern, being most visible posterior to femur II where it is more or less in the shape of an inverted Y. Posterior to coxae IV the ventrum has a prominent groove on each side whose posterior border possesses a row of 3-5 tooth-like projections, but there are no further rows of these tooth-like projections as in *T. elegantula*. Anal pore small without associated setae, in fact there appear to be no setae at all in this area. Legs in nature undoubtedly provided with claws and caruncles, although in this specimen some of them have been broken off. Femora with prominent spine-like setae anteriorly; tarsi rather long and slender, also with setae. Squama of femur I as shown in Figure 1, A.

Type material.—Described from the female holotype taken at San Juan (Santurce), Puerto Rico, March 27, 1957 together with *Rattus norvegicus* in a wooden box-type trap.

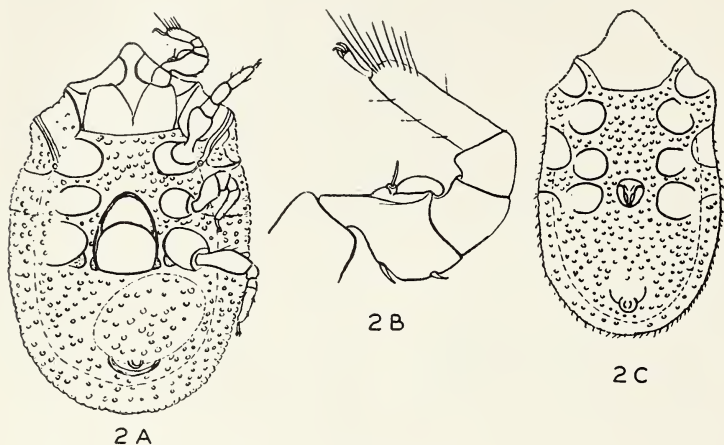
Phyllodynchus ornatus n. sp.

(Figure 2, A-C)

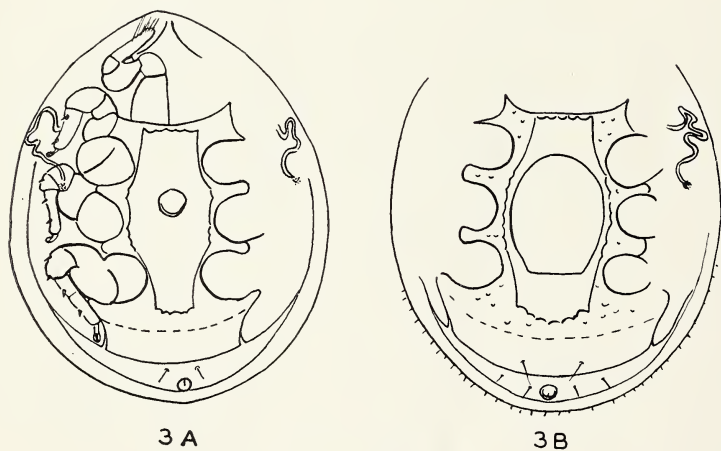
Female.—Length 575 μ , width 391 μ . Body oval, rather flat, with prominent shoulders and a projecting vertex which is more or less pointed, lateral margins markedly crenulate. Dorsal plate single, oval, densely ornamented with large pits. Ventrums (Figure 2, A) entirely covered with these pits as well, being similar in this respect to *P. septentrionalis* Trägårdh (1943). Genital plate more or less rounded anteriorly, reaching almost to the anterior border of coxae III, posteriorly extending beyond coxae IV, its posterior corners with irregular but prominent extensions, and unlike *P. septentrionalis*, it is divided at the anterior third. Stigmata and peritremes difficult to discern, the latter most visible lateral of coxae II. Anal pore obscure and small. The entire ventral side is without setae. Legs small, provided with claws and caruncles. Squama of femur I (Figure 2, B) smoothly rounded preceded by a seta inserted in a prominent tubercle.

Male.—Length, 494 μ , width 276 μ . Body more slender than in the female, ornamented with densely distributed pits, the lateral margins provided with small curved setae (Fig. 2, C). Genital pore somewhat heart-shaped, located between coxae IV. Sternal plate without the setae that characterize *P. septentrionalis*.

Type material.—Described from the female holotype captured with *Rattus norvegicus* in a wooden box-type trap at San Juan



ORNATUS



DELICTA

Fig. 2.—*Phyllodynchus ornatus*. A. Female, ventral side. B. Leg I of female. C. Male, ventral side. Fig. 3.—*Oplitis delicta*. A. Male, ventral side. B. Female, ventral side.

(Santurce), Puerto Rico on June 1, 1955 and the male allotype captured with *Rattus rattus* at San Juan (La Perla), Puerto Rico, April 6, 1957.

***Oplitis delicta* n. sp.**

(Figure 3, A, B)

Female.—Length, 460 μ , width, 391 μ . Body oval, rounded posteriorly, lateral margins smooth at least ventrally. Dorsal plate divided posteriorly into two sections, the latter of which bears two or three rows of setae; the marginal plate dorsally is sculptured and provided with minute regularly placed setae. Ventrums (Figure 3, B) divided posteriorly. Genital plate rounded anteriorly, reaching beyond the posterior borders of coxae II and posteriorly to about the middle of coxae IV, surrounded by the curiously etched perigenital scutum characteristic of the genus, which resembles but differs in details that of *O. minutissima* (Berlese) as redescribed by him in 1903. Stigmata between coxae II and III. Peritreme without a poststigmatic branch, most visible near coxa II where it pursues a highly convoluted course. Ventrums ornamented with faint pits particularly apparent posterior to the genital plate. Anal pore moderate in size, flanked by a pair of setae on each side. Legs provided with claws and caruncles, tarsi tapering, with prominent setae.

Male.—Length 414 μ , width 322 μ . Similar in shape to the female. Dorsal and marginal plates as in the female. Genital pore (Figure 3, A) between coxae II and III with a perigenital scutum similar to that of the female. Ornamental pits not prominent. Anal pore not conspicuous, much smaller than the genital pore. Tarsi with stout spine-like setae.

Type material.—Described from the female holotype and the male allotype taken with *Rattus rattus* in a wooden box-type trap at San Juan (Puerta de Tierra), Puerto Rico on June 21, 1954.

LITERATURE CITED

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